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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Alvaro Otalora

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ALEXANDRIA, VA 22314

EXAMINER

ANDERSON, JERRY W

ART UNIT

PAPER NUMBER

1794

NOTIFICATION DATE

DELIVERY MODE

09/09/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/560,364	Applicant(s) OTALORA ET AL.	
	Examiner JERRY W. ANDERSON	Art Unit 1794	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) 1-41 and 50 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 42-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>3/13/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of claims 42-49 in the reply filed on 6/26/2009 is acknowledged. The traversal is on the grounds that the common technical feature, the colored/flavored gel capsule was not considered in light of the description to determine the contribution which each of the inventions make over the prior art. (PCT rule 13.2 annex B). This is not found persuasive because the gel capsule in question, was considered in the light of the description, and found similar in methodology and chemistry to the prior art. (Lewis, J. A., (5,576,039, De Roos, K.B., et al. (6,325,859))
2. The requirement is still deemed proper and is therefore made FINAL

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claim 42 is rejected under 35 U.S.C. 102(b) as being anticipated by Warendorf, T. (6,183,801)
5. Regarding claim 1, Warendorf discloses the claimed invention, including a process for the preparation of the water jelly, jelly is prepared by blending jelly ingredients at around 70°C, ingredients are suspended in the water, pasteurized, cooled, fruit pieces, size 2 and 10 mm, (lines 52-53, col.3, '801) are pasteurized,

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injected into a stream of the jelly, heated to above 70C, filled into a container, sealed, cooled to gel the product mass, to obtain a gelled product mass in the container. (lines 59, col. 1- line 10, col. 2, '801)

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. Claims 43-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Warendorf, T., (6,183,801) in view of Lewis, J. A., (5,576,039, and further in view of De Roos, K.B., et al. (6,325,859)

9. Warendorf ('801) discloses:

- a. Water jelly by hot filling, temp at least 70° C, (lines 36-37, col.1, '801)
- b. Gelling compound . . . 0.4-0.7 % xanthan, 0.5 to 1.5 % carrageenan, 0.1 to 0.5 % locust bean gum, 0.1 to 0.5 gellan gum, (lines 49-52, col.1, '801)
- c. Jelly mass is pasteurized, (lines 65, col.1, '801)

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d. Process for the preparation of the water jelly . . . jelly is prepared by blending jelly ingredients . . . around 70°C . . ingredients are suspended in the water . . . pasteurized . . . cooled fruit phase . . . pasteurization . . . injected into a stream of the jelly . . . heated to above 70C filled into a container. . sealed . . . cooled to jell the product mass. . to obtain a gelled product mass in the container.

(lines 59, col.1- line 10, col. 2, '801)

e. Carrageenan 0.4 to 1 % combined with locust bean gum 0.1 to 0.5 %,

(lines 55-56, col. 2, '801)

f. Gel strength depend strongly . . . amount of free mono- and divalent cations, (sodium potassium and calcium) (lines 65-67, col. 2, '801)

g. Sugar 10-30%, (lines 5-6, col.3, '801)

h. Sp. Gravity 1.04 to 1.13, (lines 6-7, col.3, '801)

i. Differences in sp gr should not exceed 0.02 g/ml . . . difference in sugar concentration of 4.1 %, (lines 16-18, col.3, '801)

j. Size of fruit pieces . . 2-10 mm, (lines 52-53, col.3, '801)

k. Fruits . . . pear, peach, apple, apricots and others, (lines 54-55, col.3, '801)

l. Xanthan . . . used in fruit preparation . . . 0.4-.07 %, (lines 63-65, col.3, '801)

m. O.2-0.5 % . . . added to fruit . . . citric acid, (lines 3-4, col. 4, '801)

n. Preservative . . . sorbic acid, 0.1-0.3 %, (lines 9, col.3, '801)

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- o. Thickener and gelling agents blend in water . . heating . . . 70°C, pasteurized, (lines 15-21, col.4, '801)
 - p. Fruit phase . . . addition . . . xanthan . . . citric acid . . . pasteurized . . . added to jelly ground mass before filling . . . temp at least 70°C. . after filling, lid . . . sealed . . . cooled
 - q. Water jelly is transparent . . . filled into . . . cups . . texture similar to gelatin . . . fruit pieces are homogeneously distributed in the mass and have a size comprised between 2 and 10 mm, gel is colored. . . product has good gel firmness, (lines 63-67, col. 5, '801)
 - r. Pasteurize at 95°C for 6 min., (lines 25-26, col.4, '801)
 - s. pH 3.6-3.8, (lines 29, col. 4, '801)
10. Lewis ('039) discloses:
- t. Jelly drinks have been known for along time . . . Black Grass jelly drink is a traditional Chinese jelly drink, (lines 12-14, col.1, '039)
 - u. colored jelly type substance wherein the color is stable in acidic pH solutions, (lines 53-55, col. 1, '039)
 - v. Hydrated hydrocolloids . . . ph 2.5-6.0, (lines 17-21, col.2, '039)
 - w. Composition can be gelled by reacting the composition with mono-di-valent ions such as calcium or sodium ions, (lines 25-26, col.1, '039)
 - x. Gelling agents include gellan gum, xanthan gum, locust bean gum, pectin, alginates, carrageenan, starch, gelatin . . . 0.1 to 5 %, (lines 12-14, col.2, '039)

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- y. Carbohydrates sweeteners . . . sucrose, glucose, dextrose, invert sugar, fructose, (lines 61-63, col.2, '039)
- z. Sweeteners . . . 0.1 to 20 % by weight, (lines 10-12, col. 3, '039)
- aa. Acids . . . citric acid, malic acid, tartaric acid, fumaric acid lactic acid . . . 0.05 to 0.5% by weight, (lines 16-19, col. 3, '039)
- bb. Buffer . . . sodium citrate, potassium citrate, calcium acetate . . . 0.02 to 0.2 % by weight, (lines 22-24, col. 3, '039)
- cc. Preservative . . . sodium benzoate, potassium sorbate, (lines 33, col. 3, '039)
- dd. Water insoluble color . . . annatto, curcumin, beta carotene, carmine . . . oleoresins and pigments . . . chlorophyll, titanium dioxide, carbon black, cocoa powder, paprika, spinach, (lines 37-48, col. 3, '039)
- ee. Suspension . . . emulsion . . . 1-10 % water insoluble color, (lines 52-54, col. 3, '039)
- ff. Amount of color 0.002 to 1 % by weight of jelly type substance, (lines 60-62, col. 3, '039)
- gg. 993 ml of water, 2 g gellan gum, with 1.3g sodium citrate added, agitation . . . four ml of 0.7 % solution of beta-carotene added, orange-yell liquid heat to 120°F, cooled to 68°F, burette for producing small droplets, droplets were allow to form and dropped in to agitated bath of 1.5 % calcium chloride solution, droplets hardened into discrete spheres . . . removed and washed to clean calcium chloride from surface, (lines 15-31 , col. 5, '039)

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11. De Roos ('859) discloses

hh. Method for preparing beads containing at least one active ingredient. .

flavor. . color, (abstract, '859)

ii. Beads consisting of a matrix of reticulated, multivalent cation containing acid polysaccharide . . . flavors, fragrances . . . coloring materials , (lines 39-47, col. 3, '859)

jj. Gelling ions may be divalent calcium, strontium, barium, (lines 27-29, col. 4, '859)

kk. Preparation of emulsion. . liquid flavor oil . . . in an aqueous solution of an alkali metal alginate . . . added emulsifier, (lines 44-48, col. 5, '859)

ll. Emulsion is dripped or sprayed into an aqueous solution of multivalent cations . . . calcium . . . to convert the droplets into shape retaining water insoluble gel micro-particles, (lines 49-52, col. 5, '859)

mm. Sodium alginate 1 to 10 % by weight, (lines 23-24, col. 6, '859)

nn. Pectin . . . gellan gum . . . locust bean gum, (lines 59, 66-67, col. 6, line 22, col. 7, '859)

oo. Flavoring 2-25 % by weight, poorly water soluble to prevent flavor leakage from the alginate beads in the aqueous environment during storage, (lines 36-39, col. 7, '859)

pp. Droplets 10 to 5000 micrometers (um), (lines 66-67, col. 7, '859)

qq. Calcium ions. . 1-10% by weight, gellation of alkali metal alginate,

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rr. Flavor compounds . . . essential oils, oleoresin, cinnamon oil, . . . citrus oils . . . apple, cherry, strawberry, (lines 18-26, col. 9, '859)

ss. To improve retention and stability of the active ingredients during processing and storage without adversely affecting their release during consumption, (lines 32-35, col. 5, '859)

12. Regarding claim 43, and 46, Warendorf discloses the claimed invention as discussed above, but lacks forming edible capsules of different colors, Lewis teaches forming capsules of different colors, 993 ml of water, 2 g gellan gum, with 1.3g sodium citrate added, agitated, four ml of 0.7 % solution of beta-carotene added, heat to 120°F, cooled to 68°F, burette for producing small droplets, droplets were allow to form and dropped in to agitated bath of 1.5 % calcium chloride solution, droplets hardened into discrete spheres, which were removed and washed to clean calcium chloride from surface, (lines 15-31 , col. 5, '039) Carbohydrate sweeteners, sucrose, glucose, dextrose, invert sugar, fructose, (lines 61-63, col.2, '039) may be added to gelling solution, from 0.1 to 20 % by weight, (lines 10-12, col. 3, '039) preservative salts, sodium benzoate, potassium sorbate up to 0.1 %, (lines 33, col. 3, '039) may be added but Lewis is silent as to flavors. De Roos teaches a method for preparing beads containing at least one active ingredient, flavor or color, (abstract, '859) beads consisting of a matrix of reticulated, multivalent cation containing acid polysaccharide mixed with flavors, fragrances coloring materials, (lines 39-47, col. 3, '859) using an emulsion, liquid flavored oil in an aqueous solution of an alkali metal alginate with an emulsifier, (lines 44-48, col. 5, '859) emulsion is dripped or sprayed into an aqueous

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solution of multivalent cations, calcium to convert the droplets into shape retaining water insoluble gel micro-particles, (lines 49-52, col. 5, '859) droplets, 10 to 5000 micrometers (um), (lines 66-67, col. 7, '859)

13. Warendorf, Lewis and De Roos are analogous art in that all are concerned with the use of colored and flavored gels for human consumption.

14. It would have been obvious to modify the colored gel beads/capsules of Lewis by incorporating the flavors used in De Roos in with the colors of Lewis into the gelled comestible of Warendorf, in order to have colored jelly type substance wherein the color is stable in acidic pH solutions, (lines 53-55, col. 1, '039) and to provide a method to improve retention and stability of the active ingredients during processing and storage without adversely affecting their release during consumption, (lines 32-35, col. 5, '859)

15. Regarding Claim 44 and 47, Warendorf, Lewis, and De Roos disclose the claimed invention, including, the preparation of the water jelly, blending jelly ingredients at around 70°C, (lines 59, col. 1- line 10, col. 2, '801) the use of an emulsifier, (lines 44-48, col. 5, '859) gelling agents alginate, xanthan gum, locust bean gum, carrageenan, and gellan gum, 0.1 to 5 %, (lines 12-14, col. 2, lines 35-43, col. 5, '039) Flavoring 2-25 % (lines 36-39, col. 7, '859) , and coloring, 0.002 to 1 % by weight, (lines 60-62, col. 3, '039) sweetener, 0.1 to 20 % by weight, (lines 10-12, col. 3, '039) and the solution's Specific Gravity 1.04 to 1.13 (lines 6-7, col. 3, '801) Mixture dropped into calcium salt solution, (lines 49-52, col. 5, '859) to produce capsules with diameter 10 to 5000 micrometers (um), (lines 66-67, col. 7, '859) Example of the procedure, maltodextrin, 800g, dissolved w stirring in 3960 g of water at 50°C, 40 g of

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sodium alginate added, and stirred, cooled to 40°C, 200g of Dill oil and homogenized by vigorous stirring, fed through vibrating manifold, with six orifice of 400 um diameter, into a 6 % calcium chloride solution, beads isolated by filtration, washed and dried, particle size of beads 0.4mm to > 1 mm. (lines 46-63, col. 11, '859)

16. It would be obvious to one of ordinary skill in the art to provide a vessel with temperature controls and stirring devices to heat the ingredients to the desired temperature and to bring the ingredients to a homogeneous mix.

17. It would be obvious to one of ordinary skill to use an emulsifier (lines 44-48, col. 5, '859) in order to create an emulsion, and the amount of the emulsifier used would depend upon the relative amounts of the flavor or colorant containing oil and aqueous gel solution.

18. It would be obvious to one of ordinary skill that the amount of gelling agent used would be a characteristic of said gelling agent.

19. It would be obvious to one of ordinary skill that the separation of color/flavor components would necessitate adding the chosen color/flavor combination to the gelling mixture in separate reservoirs, and the separate processing of the separate color/flavor spiked gelling solutions in order to create unique color/flavor combinations in the produced beads.

20. It would be obvious to one of ordinary skill that the amount of polysaccharide in the gelling solution of the beads and the gelling medium be adjusted so that the difference in specific gravity is close such that the beads will be suspended in the gelling medium of the final .(lines 16-18, col.3, '801)

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21. The prior art is silent as to the viscosity of the gelling solution of the beads of the gelled medium in the final product, however, one of ordinary skill in the art would find it obvious that if a prior art product is prepared with approximately the same constituents in approximately the same concentrations, and for the same purpose as in the instant application, then the inherent characteristics of the product, such as density, specific gravity and viscosity would be approximately the same as those of the instant application.

22. Regarding claim 45, Warendorf, Lewis, and De Roos disclose the claimed invention, including, preparing a multivalent ion gelling solution for form capsules, Ion completing with alginate to form insoluble gels may be divalent calcium, strontium, and barium, (lines 27-29, col. 4, '859) Calcium ions are preferred, at 1-10% by weight, to cause gellation of alkali metal alginate, increased guluronate give strong gels with enhanced stability in the presence of non gelling/anti gelling ions Sodium (Na^{+1}), Magnesium (Mg^{+2}), (lines 47-49, col. 6, '859) thus Sodium and Magnesium salts may be added to create a more stable capsule. Preservatives such as sodium benzoate and citric acid so that pH 3.8. (lines 4-5, col. 11, '859)

23. One of ordinary skill in the art would find it obvious that the amount of the acid necessary change the pH to 3.8, would depend on the other compounds in the solution, but that the addition of divalent Calcium and Mono-valent Sodium would be variables that limited by amount of ions necessary to react with the alginate and form the beads, and the amount that is economically infeasible. The use of any amount over the minimum necessary lies in the realm of the operator.

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24. Regarding claim 49 Warendorf, Lewis, and De Roos disclose the claimed invention, including, adding the gel capsules (lines 39-47, col. 3, '859) (lines 49-52, col. 5, '859) to the gelling medium, packaging the composition, and sterilizing (lines 59, col. 1- line 10, col. 2, '801) Differences in specific gravity should not exceed 0.02 g/ml or about a difference in sugar concentration of 4.1 %, (lines 16-18, col.3, '801)

25. One of ordinary skill in the art would find it obvious to provide various equipment stirrers, holding tanks, hoppers, filling devices, refrigeration and storage and procedures of using same, so as to facilitate the transfer and packaging of the gel beads and gelled medium composition into its final form and package, and to perform such sterilization and cleaning as is proscribed.

26. Regarding claim 48, Warendorf, Lewis, and De Roos disclose the claimed invention, including, process for the preparation of the water jelly is prepared by blending jelly ingredients Sugar 10-30%, (lines 5-6, col.3, '801) Gelling agents include gellan gum, xanthan gum, locust bean gum, pectin, alginates, carrageenan, gelatin at 0.1 to 5 %, (lines 12-14, col.2, '039) citric acid, malic acid, tartaric acid, fumaric acid lactic acid . . . 0.05 to 0.5% by weight, (lines 16-19, col. 3, '039) Buffer sodium citrate, potassium citrate, calcium acetate 0.02 to 0.2 % by weight, (lines 22-24, col. 3, '039) aroma 0.3 to 0.55 % total product, (lines 57, col. 5, '810) gelled by reacting the composition with mono-di-valent ions such as calcium or sodium ions, (lines 25-26, col.1, '039) heated to around 70°C, filled into a container, pasteurized, sealed, cooled to jell the product mass, to obtain a gelled product mass in the container, (lines 59, col. 1- line 10, col. 2, '801) pH 3.6-3.8, (lines 29, col. 4, '801)

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27. One of ordinary skill in the art would find it obvious to provide various equipment stirrers, holding tanks, hoppers, filling devices, refrigeration and storage and procedures of using same, so as to facilitate the transfer and packaging of the gel beads and gelled medium composition into its final form and package, and to perform such sterilization and cleaning as is proscribed.

28. The claims differ with respect to the amounts of various ingredients as well as the specific use of certain ingredients (e.g. acids, buffers, gelling agents,). However, these ingredients are all well known in the art as taught. It would have been obvious to one having ordinary skill in the art at the time of the invention to have employed same as an art recognized alternative. As for the amounts regarding each ingredient, it would have been further obvious to have arrived at such amounts as a result effective variable in view of the degree of effect desired from each ingredient. With respect to all these added ingredients, it should be noted that recipes which involve addition of common ingredients does not amount to invention merely because it is not disclosed that no one else ever did what applicant did. Applicant must establish a co-action or cooperative relationship between ingredients which produces new, unexpected and useful function.

In re Levin, 84 USPQ 232

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JERRY W. ANDERSON whose telephone number is (571)270-3734. The examiner can normally be reached on 7 am to 5 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571) 272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/C. SAYALA/

Primary Examiner, Art Unit 1794

jwa